USDA Forest Service May 14, 2014
Grand Mesa, Uncompahgre, and Gunnison National Forests

Spruce Beetle and Sudden Aspen Decline Management Response

Basic Science and Analysis Assumptions: *Cultural Resources*

Guiding Issues and Goals

- Apply Region 2 Bark Beetle Programmatic Agreement (PA) for a phased approach to cultural resource inventories and protection.
  - Relies on use of existing and predicted data
  - Requires notification to Colorado SHPO during DEIS phase (in progress)
  - Allows for cultural resource inventories to be conducted as part of implementation phase (prior to ground disturbance)
- Protect known cultural resources during project implementation
- Consult with tribes, Colorado SHPO and interested parties
- Apply GIS predictive models for prehistoric and historic use of forests

Overarching Assumptions

Human occupation of West-Central Colorado spans at least 10,000 years. Prehistoric use covers the Paleo-Indian, Archaic, Formative and Proto-historic periods, 8000 BC to 1800 AD. Archaic hunter-gatherers left their mark on the landscape, as well as ancestors of the Ute Indians. Hunting and gathering were their primary adaptation to the upland environments. Sites often consist of stone artifacts, pottery, debris and features; such as projectile points, stone tools and fragments, pottery shards, fire hearths, game drives, and remnants of camping structures. Historic use began in the 18th Century and in earnest during the 19th Century, and consisted primarily of activities associated with mining, historic travel routes, logging, and grazing, homesteading and early 20th natural resource management by the Forest Service.

Existing cultural resource data will be utilized for analysis in the DEIS. GIS modelling will help predict types of cultural resources to be located within potential treatment areas. Best management practices and design features will be utilized to avoid cultural resource through project design and avoidance (see below). The project implementation team will coordinate with Forest and District Archaeologists to identify through field inventory and research and mitigate any effects by avoidance prior to implementation. Cultural resource locations will be kept confidential for internal use only.

Methods – Analysis Approach

Analysis will focus on known and expected cultural resources derived from existing data, and GIS modelling. Avoidance of cultural resource during project design and implementation will

guide analysis of alternatives, including the No Action alternative. Design features and proven best management practices will be used to avoid impacts.
Design features are as follows:

- Cultural resource surveys will occur prior to project implementation. Locations of all known cultural resource sites needing protection would be shown on internal working maps not subject to disclosure and/or identified on the ground so that these areas are avoided and protected during all phases of project implementation.
- If any new cultural resource sites are discovered during implementation, project activities will stop and an archeologist will be contacted immediately. The archeologist will evaluate the site and determine how the site will be protected.
- Activities involving hazardous tree removal, grapple piling, mechanical treatment, skid trails and landing areas: For all cultural resource sites located during the field inventory or previously known, no mechanical treatment will occur within the site boundary plus a 50 foot buffer around the site. If treatment is necessary, these sites and the 50 foot buffer will be hand treated to remove hazard trees and accumulated fuel build up, per Stipulation 5.B.b. ii and Stipulation 6.a and 6.b, Standard Treatments for Historic Properties, in the 2010 Programmatic Agreement for Bark Beetle, Hazardous Fuel and Tree Reduction Programs.
- Activities involving road construction, temporary road construction and skid trails: For all cultural resource sites located during the field inventory or previously known, a 50 foot buffer around the site will be established. The road control line will be moved to avoid the site and the 50 foot buffer area. If the construction cannot physically be relocated and there is the potential for unidentified buried cultural remains, the construction activities in the area will be monitored by an archaeologist.
- Specific site treatments for prescribed fire will be addressed during this process above as well. Generally, prehistoric lithic site may be burned over without adverse effects and would not be protected. Combustible and fire-sensitive sites, such as historic and ethnographic structures, would be protected and the following proposed standard treatments would apply to site targeted for avoidance:
    - All cultural resource sites will be avoided during proposed ground-disturbing activities such as construction of fire lines. All flammable sites will be given a 50-foot buffer and protected from fire by all feasible and appropriate means, including use of fire lines, wet lines, hose lays, and wrapping.
- For each year of implementation, proposed treatment areas will be subjected to annual inventory, reporting, and consultation requirements under the PA with SHPO prior to project implementation.

Expected Outcomes /Results

All known cultural resources located within proposed treatment areas will be avoided through project design and implementation. If any new cultural resource sites are discovered during implementation, project activities will stop and an archeologist will be contacted immediately. The archeologist will evaluate the site and determine how the site will be protected. Site locations will be kept confidential and for internal use only.